



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of : **Confirmation No. 4778**
Claudio ZAMPIERI : Attorney Docket No. 2005_1196A
: Group Art Unit 3618
Filed September 23, 2005 : Examiner Cynthia F. Collado
IN-LINE ROLLER-SKATE FOR RACING : **Mail Stop: AF**
(AS AMENDED)

DECLARATION UNDER 37 CFR 1.132

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

I, Mr. Dario De Lazzari, hereby present and state the following facts for consideration in the above-referenced U.S. patent application:

1. I am a technical manager at MGM S.p.A., the Assignee of the invention in the above-referenced U.S. patent application by virtue of an Assignment recorded at Reel 017860, Frame 0049.

2. My educational and technical background is as follows:
Diploma of Mechanical Industrial Technician obtained in 1974.

3. My employment history is as follows:
1974-1979: I.M.S. Industrie Meccaniche Scardellato (Treviso): Designer of apparatus for chemical plants and refineries, then I took over the responsibility of "Non-Destructive Tests" department cooperating with the Quality Control service;

1979-1989: NORDICA S.p.A. (Montebelluna, Treviso): Organization and Methods analyst, then I was in charge of a manufacturing division;

1989-1996: H.T.M. SPORT S.p.A. (Maser, Treviso): Assistant Technical Manager with the responsibility of the "Organization and Costs" division and production planning, then in charge of manufacturing and technical services reporting directly to the Managing Director; in 1995 General Manager of a controlled company in Estonia producing ski boots, ski bindings and swimming flippers;

1996 up to date: M.G.M. S.p.A. (Vedelago, Treviso): Operation Manager of skate division; Responsible of R&D for in-line skates (trademarks Fila and Hypno), as well as of sourcing and manufacturing in Asia for skates and trekking shoes.

4. In view of my educational and technical background as described above, and my employment history as further described above, I am at least of ordinary skill in the art to which the above-referenced U.S. patent application pertains, which is in-line roller-skates.\

5. As a technical manager at MGM S.p.A. I worked together with Mr. Claudio Zampieri, the inventor in the present application during the development of the invention. By virtue of such position, I have knowledge of the facts and circumstances regarding the development of this invention.

6. I have read and understood the contents of U.S. Patent Application 10/549,857, which is the national phase of the International Application PCT/EP2004/002448. Further, I have read and understood the contents of the claims of this application, including an amended claim 5 that is to be submitted together with this Declaration, and which reads as follows:

Claim 5 (Currently Amended) An in-line roller skate for racing, comprising:
a footwear having a sole on the bottom thereof, said sole having a heel-piece zone, and a toe juncture area corresponding to an area of a foot where the toes of the foot join the foot;
a chassis supporting at least four wheels including a front wheel and a second wheel immediately behind said front wheel, said front wheel and said second wheel being located in a front zone of said chassis;

at least first and second binding points on said sole ~~attaching for attachment of~~ said sole to said chassis, said first binding point being positioned in proximity of said heel-piece zone of said sole, and said second binding point being positioned approximately in the a-toe juncture area of said sole;

fasteners ~~for joining~~ said footwear to said chassis at said first and second binding points, said second binding point being located between said front wheel and said second wheel;

wherein said at least four wheels are solely wheels having a diameter of at least 100 mm; and

~~wherein a height of said front zone of said chassis in relation to a ground contact plane of said at least four wheels is substantially equal to said diameter of said at least four wheels.~~

wherein a center to center distance between said first and second binding points is between 170 mm and 210 mm.

7. I have reviewed the Office Action issued by the United States Patent and Trademark Office on May 31, 2007, finally rejecting claims 5-7 of the application over U.S. Patent 6,340,164 to Borel. I have also reviewed the Borel patent, as well as a Salomon "Vinny Minton" model roller skate which corresponds to the Borel patent.

8. Prior to the development of the present invention, racing-type in-line roller skates used in competition were generally provided with wheels having standard-sized diameters of either 80 mm or 84 mm, depending on the characteristics of the skate and the needs of the user. The connection of the sole of the footwear to the chassis of the skate was at a pre-defined center to center distance of 165 mm.

There is a general need for a unified sizes to be defined, which arises from the necessity for different wheels and different footwear to be coupled to a chassis. This allows both manufacturers to mass produce the skates while allowing the user to personalize the skate through a replacement of the wheels or the footwear with corresponding component parts available on the market. Such standardized sizes are also used in competition for, for example, racing skates.

It had previously been desired to be able to increase the size of the wheels to a larger diameter on the order of 100 mm in order to boost the performance capabilities of a skate, particularly in racing. As shown in Fig. 1 of the above-referenced U.S. patent application, a prior art solution was to have three or more wheels of a larger diameter with the one wheel (9) situated behind the front wheel with a smaller diameter in order to be able to keep the height of the chassis in relation to the running plane within acceptable limits. The chassis also has to be capable of accommodating on its interior screws or rivets to connect the toe of the footwear to that same chassis.

However, this has been generally considered to be a compromise solution that fails to fully meet high-performance requirements in terms of stability, speed and accuracy. It has accordingly been an object of the development of the present invention to avoid this prior art solution and to provide an in-line roller skate that can have oversized diameter wheels while avoiding the problems that are associated with a smaller second wheel, which include instability, vibration and poor control. A further purpose of the development of the present invention was to improve the torsional rigidity of the roller skate.

With the present invention, as shown in Fig. 2 of the application, the footwear 102 has its sole provided with a first binding point for a chassis positioned in proximity of a heel-piece zone of the sole (105) and a second binding point positioned approximately in the toe juncture area of the sole (111). The center to center distance between the first and second binding points is between 170 mm and 210 mm. This is a greater distance than that of the prior art; the Background of the Invention of the present application refers to a prior center to center distance of 165 mm. The Borel patent discloses no connection distance. However, the center to center distance of the binding points between the chassis and footwear of the Vinny Minton model is approximately 167 mm. By comparison, the center to center distance between the binding points of one example of a product on the market made according to the present invention (FILA model M100) is approximately 195 mm.

9. The greater center to center distance as recited in claim 5 above and as reflected in the corresponding FILA model M100 is enabled by providing the footwear/chassis binding points in the heel-piece zone and in the toe juncture area. By providing the binding points of these locations, it becomes possible to provide larger wheels without increasing the height of the chassis from the ground with respect to the prior art. The reason for this is that the toe juncture area binding point is moved to a position with respect to the chassis that is located between the front wheel and the second wheel.

10. The above claim 5 requires the wheels to solely be wheels having a diameter of at least 100 mm. There is no disclosure in Borel of wheels of this size. Borel is directed to an aggressive-type skate meant for performing tricks, as evidenced by its commercial embodiment being endorsed and named after Vinny Minton. The wheel size of the actual Vinny Minton model is about 55 mm in diameter.

11. In the Office Action, the Examiner takes the position that it would have been obvious to increase the diameter of the wheels to at least 100 mm. However, to one of ordinary skill in the art, such an increase in diameter is not obvious from Borel. This is because Borel is directed to an aggressive skate where an increase in the size of the wheels is not an advantage. If anything, such an increase in size would be undesirable.

The Examiner states that the increase in the size of the diameter of the wheel is the discovery of an optimum value of a result effective variable, and thus involves only routine skill in the art. However, the size of wheels for an aggressive skate as disclosed by Borel, to the extent that the size is a “result effective variable,” is not optimized by increasing its size. Such an increase in size would be against the knowledge of one of skill in the art. To my knowledge, the optimum size for the wheels for a skate of the type disclosed by Borel is in fact about the 55 mm diameter size of the actual Vinny Minton model.

It should also be noted that if the size of the diameter of the wheels is increased on the skate of Borel, then the skate would become correspondingly higher from the ground, which is not desired in an aggressive skate. Looking at the Vinny Minton model, the wheel would

interfere with the binding point locations at both the front and the back. Substantial rearrangement and set up of the entire chassis would need to take place. To a large degree this goes against the purpose of an aggressive skate and is not “obvious” to one of skill in this art. It goes against the knowledge of one of ordinary skill with regard to aggressive skates.

The Examiner states that it is obvious to move the first and second binding points to be between 170 mm and 210 mm, because, as the Examiner states, this is also the discovery of an optimum or workable range and involves only routine skill in the art. However, it appears here that the Examiner is treating this limitation separately and apart from the wheel size limitation. These two features of the invention as described in claim 5 above work together to allow for larger sized wheels without the compromised solution discussed above. The art did not in fact recognize that the distance between the first and second binding points could be changed in combination with the change in wheel size so as to arrive at an elegant solution to the problem described in the specification of the present application with respect to Fig. 1.

To the knowledge of one of ordinary skill in the art at the time the present invention was made, the combination of at least four wheels that are solely wheels having a diameter of at least 100 mm supported on a chassis that has first and second binding points to footwear that are between 170 mm and 210 mm was not obvious to one of ordinary skill in the art, and was not merely a recognition of optimum or workable ranges.

I further declare that all statements made herein of my own knowledge are true, and that all statements on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Dec. 21st, 2007
Date

David Belarrat
Signature